



## North Carolina Department of Environment and Natural Resources

Dexter Matthews, Director

Division of Waste Management

Beverly Eaves Perdue, Governor  
Dee Freeman, Secretary

August 3, 2010

Sent Via U.S. Mail and Via Email - [jmitchell@alexandercountync.gov](mailto:jmitchell@alexandercountync.gov)

Mr. Josh Mitchell  
Alexander County Solid Waste  
621 Liledoun Road  
Box 12  
Taylorsville, NC 28681

**Re: NOTICE OF VIOLATION  
Alexander County C&D Over MSW Landfill, Permit #02-01**

Dear Mr. Mitchell:

On July 9, 1998 the Solid Waste Section sent correspondence to Alexander County regarding the initiation of an Assessment of Corrective Measures as required by 15A NCAC 13B .1634 and .1635. The County submitted an *Assessment of Corrective Measures Report* to the Solid Waste Section on April 11, 2008, pursuant to 15A NCAC 13B .1635. The County conducted a public meeting on June 26, 2008. After the public meeting was conducted, Alexander County selected a remedy, and the Solid Waste Section approved the remedy on February 2, 2009. The selected remedy included Monitored Natural Attenuation (MNA), Phytoremediation near MW-24, Enhanced Bioremediation near MW-16 and MW-26, Active Methane Extraction System near MW-1B, and Acquisition of Property adjacent to MW-16 and MW-1B. The County submitted a *Corrective Action Plan* on September 19, 2008, and after two revisions, the Solid Waste Section approved the *February 6, 2009 Corrective Action Plan* on February 19, 2009. The Solid Waste Section, in its February 19, 2009 letter, stated that the *February 6, 2009 Corrective Action Plan* was approved for **immediate implementation**.

On July 15, 2010, the Solid Waste Section issued a Warning Notice to the County for environmental monitoring reporting deficiencies, and the Solid Waste Section received a response from the County via their environmental consultant, Municipal Engineering Services Company, P.A., on July 26, 2010. Based upon the review of the July 26, 2010 *Response to Warning Notice dated July 15, 2010*, a July 28, 2010 conversation with Mr. Josh Mitchell, a further re-review of the *February 6, 2009 Corrective Action Plan*, and pursuant to the North Carolina General Statute 130A-22(a) and to the 15A North Carolina Administrative Code (NCAC) 2L and 13B, you are hereby informed that you are in violation of the following: 15A NCAC 13B .0545(4), 15A NCAC 13B .1636(d), 15A NCAC .1637(a)(2), 15A NCAC .1634(b), 15A NCAC 13B .1634(d)(2), 15A NCAC 13B .1637(a)(1), and 15A NCAC 2C .0107(a)(2)(J).

**15A NCAC 13B .0545(4)** requires that the owner and operator must specify as part of

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the selected remedy a schedule for initiating and completing remedial activities included in a corrective action plan. This schedule must be submitted to the Division for review and approval.

**15A NCAC 13B .1636(d)** requires that the owner or operator shall specify as part of the selected remedy a schedule for initiating and completing remedial activities. This schedule shall be approved by the Division.

**15A NCAC 13B .1637(a)(2)** states that based on the approved schedule for initiation and completion of remedial activities, the owner or operator shall implement the approved corrective action remedy.

The *February 6, 2009 Corrective Action Plan* states that implementation of corrective action will begin within 30 days of the Corrective Action Plan approval. Alexander County has failed to follow the schedule within the County's approved *February 6, 2009 Corrective Action Plan*. Alexander County has failed to install the seven sentinel wells (MW-28 through MW-34) in 2009 required to determine the effectiveness of the selected remedy; conduct the HRC injections near MW-16 and MW-26 after the June 2009 semiannual water quality monitoring event (during which the MNA performance parameter baseline will be established) and conduct the second HRC injections in March 2010; and install the 10 active methane wells along the periphery and outside of the current waste limits near MW-1B.

**Within 30 days of receipt of this letter**, install the seven sentinel wells (MW-28 through MW-34) as indicated within the approved *February 6, 2009 Corrective Action Plan* and which were scheduled to be completed May 2009.

**Within 10 days of receipt of this letter**, submit an application for an injection permit that is required by the NCDENR Underground Injection Control (UIC) Section for the HRC injections.

**Within 90 days of receipt of the UIC Permit**, conduct the first HRC injections near MW-16 and MW-26 that were to be conducted in April 2009.

**Within 120 days of receipt of this letter**, install the 10 active methane wells along the periphery and outside of the current waste limits near MW-1B as outlined within the approved *February 6, 2009 Corrective Action Plan*.

On March 15, 2010, the Solid Waste Section sent an email to the County and their environmental consultant regarding the status of the property acquisition adjacent to the facility as required by the County's approved selected remedy. On March 23, 2010, the County sent an email to the Solid Waste Section with several attachments regarding the status of the adjacent property near MW-16 and owned by Crescent Resources. **Please continue the property acquisition as outlined within the County's approved *February 6, 2009 Corrective Action Plan*.**

The County's approved *February 6, 2009 Corrective Action Plan* stated that a minimum of 4,000 hybrid willow seedlings will need to be planted at the onset of corrective action and is tentatively scheduled to occur during May-June 2009. Based upon a July 28, 2010 conversation with Mr. Josh Mitchell, approximately 170 trees were planted for phytoremediation near MW-24. Also, the County's approved *February 6, 2009 Corrective Action Plan* stated that protective fencing to prevent damage to the seedlings by wildlife will be constructed around the area of plantings, and water levels

in MW-12 and MW-24 will be monitored on a daily basis with pressure transducer data loggers that will be installed in the wells prior to planting of the hybrid willow trees. Water level readings will be recorded twice daily, and the water level data downloaded from the data loggers on a monthly basis by Municipal Engineering field personnel. **Within 30 days of receipt of this letter**, submit documentation that the protective fencing has been installed, the pressure transducer data loggers were installed in MW-12 and MW-24, and water level data has been collected on a monthly basis from MW-12 and MW-24. **Within 30 days of receipt of this letter**, please also submit a schedule to plant the remaining trees as indicated within the County's approved *February 6, 2009 Corrective Action Plan*.

**15A NCAC 13B .1634(b)** states that within 90 days of triggering an assessment monitoring program, and annually thereafter, the owner or operator shall sample and analyze the ground water for all constituents identified in Appendix II of 40 CFR Part 258. 40 CFR Part 258 -"Appendix II List of Hazardous Inorganic and Organic Constituents", is incorporated by reference including subsequent amendments and editions. A minimum of one sample from each downgradient well shall be collected and analyzed during each sampling event. For any constituent detected in the downgradient wells as the result of the complete Appendix II analysis, a minimum of four independent samples from each well (background and downgradient) shall be collected and analyzed to establish background for the new constituents.

**15A NCAC 13B .1634(d)(2)** states that within 90 days, and on at least a semiannual basis thereafter, resample all wells of the approved detection monitoring system for the unit for all constituents listed in Appendix I and for those constituents in Appendix II that have been detected in response to Rule .1634(b). A report from each sampling event shall be submitted to the Division and placed in the facility operating record. At least one sample from each well (background and downgradient) shall be collected and analyzed during each of these sampling events.

**15A NCAC 13B .1637(a)(1)** states that based on the approved schedule for initiation and completion of remedial activities, the owner or operator shall establish and implement a corrective action ground-water monitoring program that: (A) At a minimum, meets the requirements of an assessment monitoring program under Rule.1634; (B) Indicates the effectiveness of the corrective action remedy; and (C) Demonstrates compliance with ground-water protection standards.

Alexander County has conducted Appendix II water quality monitoring inconsistently and has discontinued Appendix II water quality monitoring without Solid Waste Section approval. Please re-initiate Appendix II water quality monitoring during the next semiannual water quality event at the facility scheduled for December 2010. **Within 30 days after reinitiating Appendix II water quality monitoring**, please update the Ground and Surface Water Sampling and Analysis Plan located within the *February 6, 2009 Corrective Action Plan* to account for the addition of Appendix II water quality monitoring as required by 15A NCAC 13B .1637(a)(1).

**15A NCAC 2C .0107(a)(2)(J)** states that the minimum horizontal separation between a well, intended for a single-family residence or other non-public water system for a sanitary landfill should be 500 feet.

**Within 90 days of receipt of this letter**, Alexander County is instructed to properly abandon the on-

site water supply well located next to the scale house using the methods outlined in 15A NCAC 02C .0113. The Solid Waste Section understands that the on-site water supply well is no longer in use, however, the objective is to prevent the spread of contamination and protect present and future users of groundwater.

Immediately take all necessary steps to ensure the protection of public health and the environment. Pursuant to N.C.G.S. 130A-22(a) and 15A N.C.A.C. 13B .0701 - .0707, an administrative penalty of up to **\$15,000.00 per day** may be assessed for each violation of the Solid Waste Management Laws and Regulations. For violations noted here, you may be subject to enforcement actions including penalties, injunction from the operation of solid waste management facilities, and any such further relief as maybe necessary to achieve compliance with the NC Solid Waste Management Act and Rules.

The Solid Waste Section solicits your cooperation and would like to avoid taking enforcement action. At the same time, it is your responsibility to comply with the requirements of the Solid Waste Management Statute and the North Carolina Administrative Code. If you have any questions or concerns regarding this matter, please contact me either at (919) 508-8500 or by email at [jaclynne.drummond@ncdenr.gov](mailto:jaclynne.drummond@ncdenr.gov).

Sincerely,



Jaclynne Drummond  
Hydrogeologist  
Environmental Compliance  
Solid Waste Section

cc via electronic mail: Rick French, Alexander County Manager ([rfrench@alexandercountync.gov](mailto:rfrench@alexandercountync.gov))  
Mark Poindexter, Field Operations Supervisor  
Deb Aja, Western District Supervisor  
C.T. Gerstell, Environmental Senior Specialist